

WHAT IS CLAIMED IS:

1. A monitoring apparatus comprising:  
a current detector;  
a time recorder coupled to the current detector; and  
a counter coupled to the current detector.
2. The apparatus of claim 1, wherein the current detector is an alternating current (AC) detector.
3. The apparatus of claim 1, wherein the time recorder comprises an hourmeter including a viewable display.
4. The apparatus of claim 3, wherein the display comprises a digital liquid crystal display.
5. The apparatus of claim 3, wherein the hourmeter comprises a battery.
6. The apparatus of claim 4, wherein the battery is a lithium battery.
7. The apparatus of claim 1, wherein the counter comprises a viewable display.
8. The apparatus of claim 7, wherein the viewable display comprises a liquid crystal display.
9. The apparatus of claim 8, wherein the counter comprises a battery.
10. The apparatus of claim 9, wherein the battery is a lithium battery.
11. The apparatus of claim 1, further comprising a chassis to house the current detector.
12. The apparatus of claim 11, wherein the time recorder and counter are mounted to a surface of the chassis.
13. The apparatus of claim 11, wherein the chassis further comprises a power cord for plugging into a power receptacle, and a monitor power receptacle for receiving a power cord of an electrical appliance to be monitored.

14. The apparatus of claim 13, wherein the power cord and monitor power receptacle are household two, three, or four prong cords and receptacles.

15. The apparatus of claim 13, wherein the electrical appliance to be monitored is a pump.

16. The apparatus of claim 1, wherein the current detector comprises a sensor hole with a power lead extending therethrough at least once.

17. The apparatus of claim 16, wherein the power lead is looped through the sensor hole at least twice.

18. The apparatus of claim 17, wherein the power lead is electrically connected to an electrical appliance to be monitored.

19. The apparatus of claim 16, wherein a voltage output is produced by the current detector in response to a current in the power lead.

20. The apparatus of claim 19, wherein the voltage output is proportional to the current in the power lead.

21. The apparatus of claim 20, wherein the voltage output ranges between zero and five volts.

22. The apparatus of claim 21, wherein the voltage output ranges between three and five volts.

23. The apparatus of claim 19, wherein the time recorder is induced to a running state in response to the voltage output from the current detector.

24. The apparatus of claim 23, wherein the time recorder is induced to the running mode at any voltage output equal to or greater than three volts.

25. The apparatus of claim 23, wherein time recorded by the time recorder in the running state is cumulative.

26. The apparatus of claim 19, wherein the counter increments by one count in response to a voltage output change from approximately zero volts to a positive or negative voltage.

27. The apparatus of claim 1, wherein the apparatus uses no external power sources to operate the time recorder and counter.

29. A monitoring apparatus comprising:  
an electrical appliance;  
a power supply for the electrical appliance; and  
a monitor electrically connected between the power supply and the electrical appliance for recording hours of operation and number of starts of the electrical appliance.

30. The monitoring apparatus of claim 29, wherein the electrical appliance comprises a sump pump.

31. The monitoring apparatus of claim 29, wherein the power supply is a 120 VAC power outlet.

32. The monitoring apparatus of claim 29, wherein the monitor comprises:  
a current detector;  
an hourmeter coupled to the current detector; and  
a counter coupled to the current detector.

33. The monitoring apparatus of claim 32, wherein the monitor further comprises a chassis, and the current detector is disposed within the chassis, with the hourmeter and counter mounted to an outer surface of the chassis.

34. The monitoring apparatus of claim 32, wherein the current detector comprises a Syscon International CV-1-5 AC current detector, the hourmeter comprises a Reddington 5320-1000 hourmeter, and the counter comprises a Reddington 5300-1000 digital counter.

35. A method of monitoring electrical appliance run time comprising the steps of:

running the electrical appliance power current through a monitor; and  
recording and the time the appliance is energized on the monitor.

36. The method of claim 35, wherein the power current runs through the monitor before it reaches the electrical appliance.

37. The method of claim 36, further comprising recording the number of starts of the electrical appliance.

38. The method of claim 35, further comprising the step of displaying accumulated time the appliance has been energized.

39. The method of claim 35, wherein the monitor comprises:

a current detector;

an hourmeter coupled to the current detector;

a counter coupled to the current detector;

a power cord adapted for use with a household power outlet; and

a power receptacle receptive of a two, three, or four-pronged household power cord of the electrical appliance.

40. A method of counting the starts of an electrical appliance comprising the steps of:

running a current of the electrical appliance through a monitor, and

incrementing a counter of the monitor by one count each time the monitor detects a change in the current from approximately zero amps to a positive amp value.

41. The method of claim 40, further comprising recording the time the current is at a positive value.

42. The method of 41, wherein a start count number and an appliance run time number are recorded on the monitor and shown on a visual display.